Outreach Material
2005 Coal Truck Powered Haulage Accidents

The average truck driver's at-mine experience has recently decreased significantly. Accident statistics show that truck drivers with less experience at a mine are more vulnerable to potentially serious accidents, including loss of control on grades and dumping accidents. Those with the least mine experience include younger truck drivers now entering the work force, many of which are employed by independent contractors.

Coal operators and independent contractors are asked to ensure that:

1. New drivers are thoroughly trained on equipment and mine-specific road conditions;
2. Trucks are not overloaded;
3. Equipment is properly examined and maintained; and
4. Steep haul roads have provisions for arresting runaway trucks such as runaway ramps etc.

FACTS

- 41 powered haulage accidents involving coal truck drivers were reported during the first half of 2005, several of which resulted in (or had the potential to cause) serious injuries.
- Over ½ of all coal trucks involved in these accidents were operated by independent contractors, a two-fold increase in this ratio since 2003 (Chart 1).
- 40% of the coal truck drivers involved in powered haulage accidents in 2005 were 29 years of age or younger. On average, contract coal truck drivers injured in 2005 were 7 years younger than their mine-employee counterparts (Chart 2).
- Since 2004, the average at-mine experience for truck drivers involved in powered haulage accidents dropped from 5 years to less than 2 years. Experience at the mine was 5 times greater for operator-employed drivers than for contractors (Chart 3).
- 37% of the 2005 powered haulage accidents involving coal trucks occurred when the driver lost control of the truck on a grade. Such accidents were almost 3 times as likely to involve contract drivers (Chart 4).
- Another 29% of these accidents occurred while dumping. Such accidents were twice as likely to involve contract drivers (Chart 4).

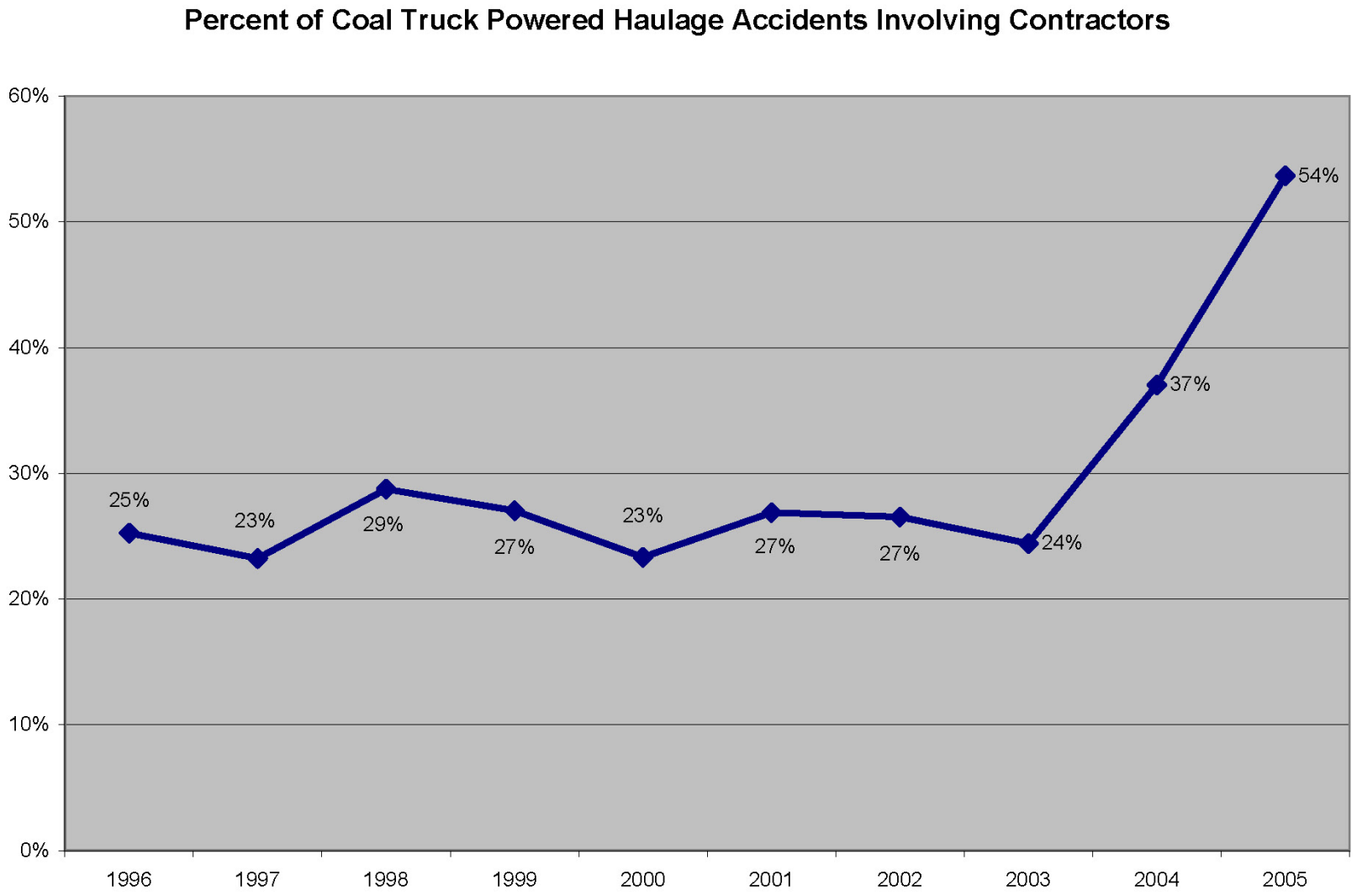

Percent of Coal Truck Powered Haulage Accidents Involving Contractors
60%
50%
40%
30%
20%
10%
0%
25%
23%
29%
27%
23%
27%
27%
24%
37%
54%
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005

Chart 1

Average Age of Coal Truck Drivers Involved in Powered Haulage Accidents

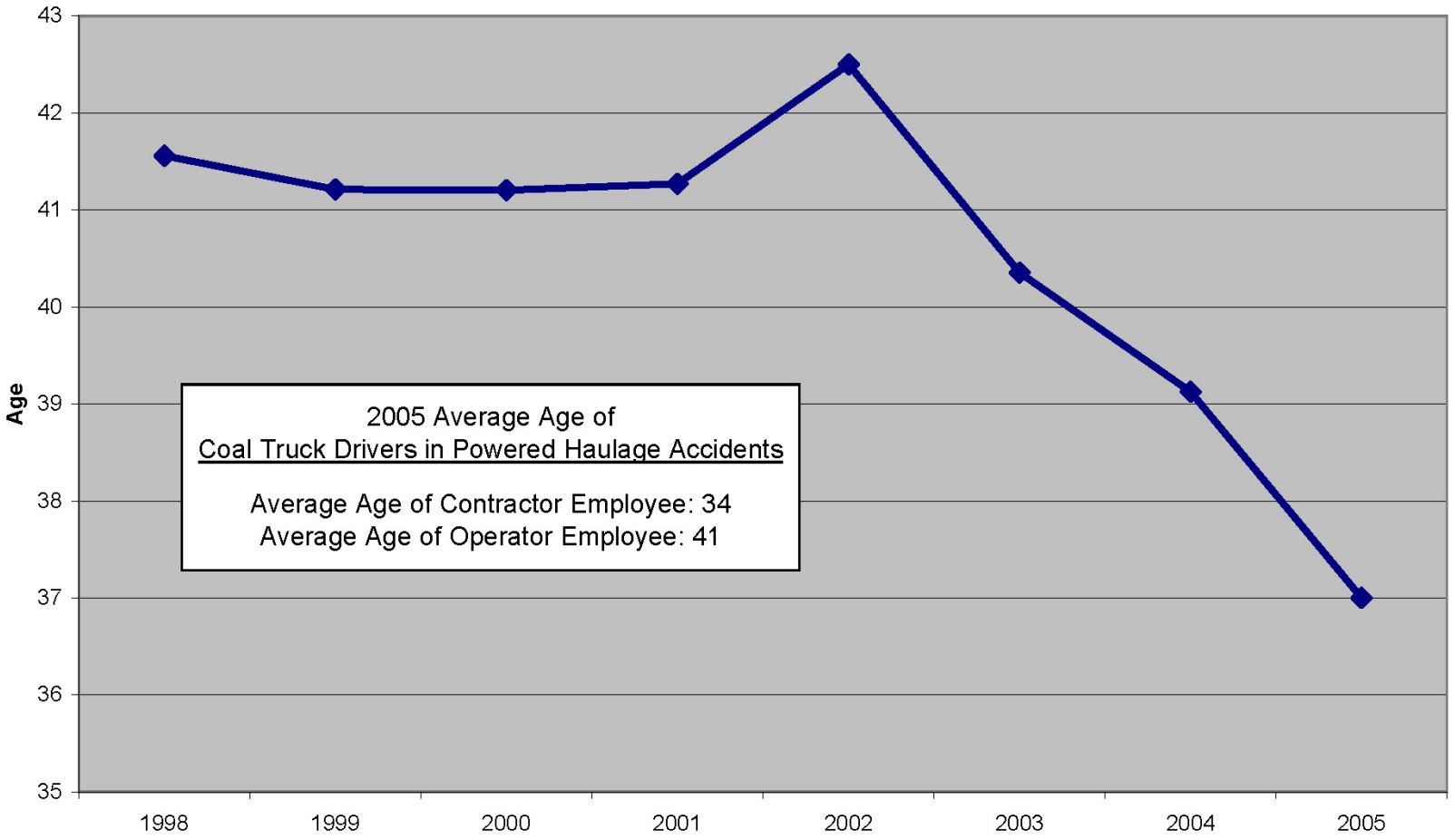


Chart 2

Average Mine Experience of Coal Truck Operators Involved in Powered Haulage Accidents

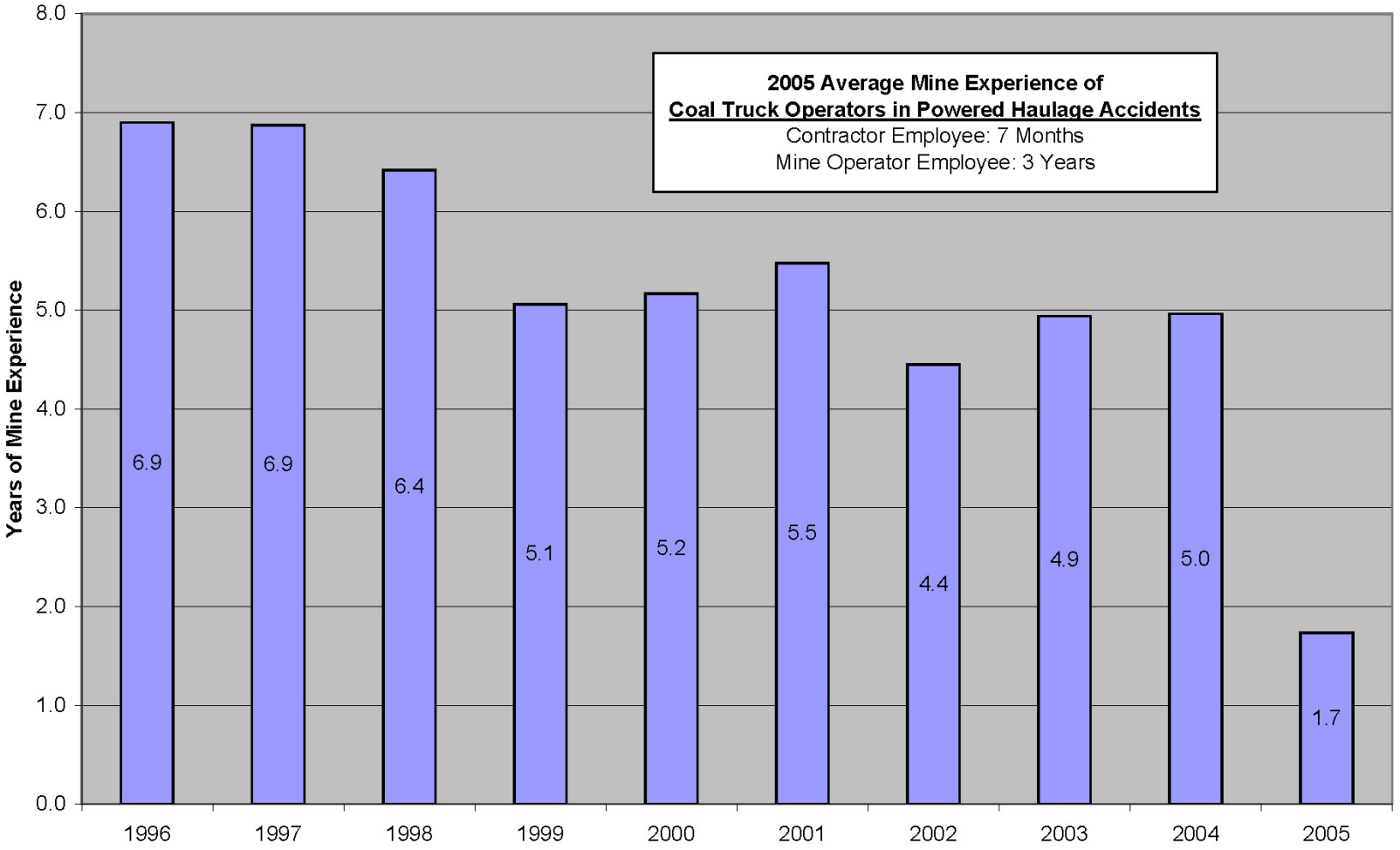
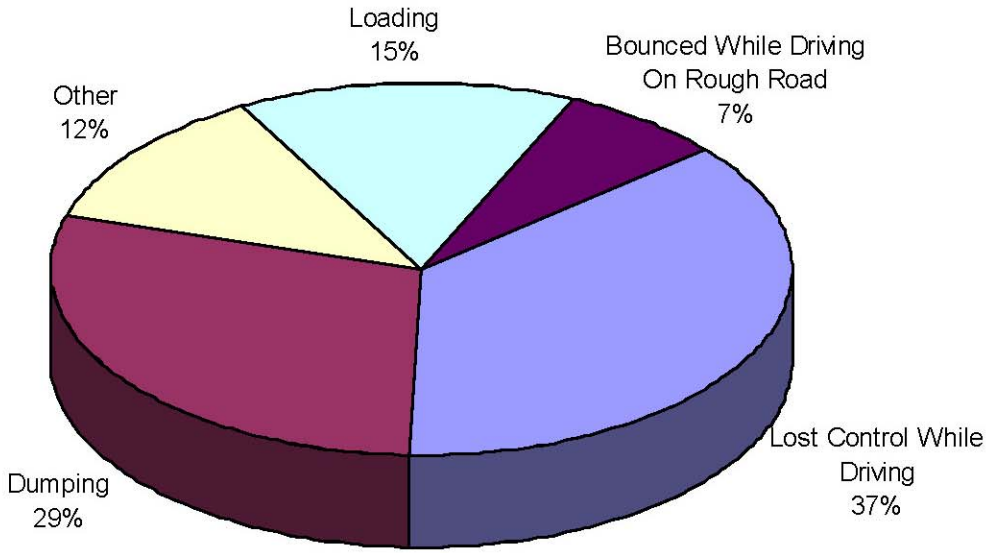


Chart 3

2005 Coal Truck Powered Haulage Accidents by Activity



2005 Powered Haulage Accidents **Activity at Time of Accident**	**Contractors**	**Operators**	**Total Accidents**
Lost Control While Driving	**11**	4	15
Dumping	**8**	4	12
Other	2	3	5
Loading	1	5	6
Bounced While Driving On Rough Road	0	3	3
Total	**22**	**19**	**41**

Chart 4

On June 13, 2005, a 27-year old truck driver was seriously injured when the universal joint on the drive shaft of this loaded truck failed as he descended the mine haul road. The road grade was 21% where the failure occurred.

BEST PRACTICES

Mine Operators/Contractors

- Post truck-specific signs for speed limit and proper gear.
- Ensure that trucks are properly loaded for safe capacity and conditions.
- Post retarder limitations, showing the maximum safe speed for various grades, inside the cab where it can be easily referenced by the driver (manufacturers can help you with this information).
- Ensure that drivers are familiar with the Operator's Manual for each truck they operate, especially the sections on the proper use of brakes and retarder systems.
- Monitor drivers for safe work habits, especially seatbelt use and speed control.

Truck Drivers/Equipment Operators

- Operate loaded trucks in an appropriate gear for the grade, load, and speed.
- Never operate a truck where the brakes alone will not stop it.
- Never rely on engine brakes and transmission retarders as substitutes for keeping brakes properly maintained. These devices are "brake savers" and should not be relied upon as brakes.
- Ensure that seat belts are used, in good condition, and operating properly.
- Conduct pre-operational checks to identify any defects that may affect the safe operation of equipment before it is placed into service. Pay special attention to ensuring the brakes are properly adjusted and there are no significant air leaks.

Frequently Asked Questions/Answers

- What amount of air leakage is acceptable?
  With the service brakes fully applied, if the compressor can't keep up with the leaks at engine idle, you have way too much leakage.
- How do I select the proper gear for a given down grade?
  Choose the same gear as you would need to go up that grade.
- Why it is important to wear a seat belt?
  You will typically feel 10 G's of force during a roll over. This means that without a seat belt, if you are a 200 lb person, you would need to be strong enough to lift 2000 lbs with your hands in order to keep yourself seated by holding onto the steering wheel.
- What are the first 3 things to do in a potential runaway situation?
  1. Fully apply the **Retarder** and
  2. Apply the **Brakes**;
  3. If this doesn't control your speed, immediately maneuver into a **Ditch** or runaway area.

  Remember, time is your enemy. **ACT FAST**!
- How does loading a truck above its rated capacity accelerate brake wear and the potential for catastrophic failure?
  Brakes will go out of adjustment on overloaded trucks in a matter of days, just due to accelerated lining wear. Trying to control speed on an overloaded truck generates additional brake heat, expanding even good drums and walking them away from the linings, resulting in no brakes.
- How reliable are automatic brake slack adjusters?
  If they don't receive periodic **meticulous** cleaning and lubing, they just stop working and it's like you never had them. So, don't let them substitute for manually checking brake adjustments.
- How can brakes be checked to determine if they need adjustment?
  2 inches of push rod travel is too much.
- Why are oversized drums dangerous?
  Drums store heat from brake applications. The thicker the drum, the more heat it can store before it expands and your brakes fade away. That's why you should never cut brake drums over the allowable limits.